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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/727,700  | 12/03/2003  | Gautam H. Mudunuri   | 23402-08572                   | 8643             |
| 758   | 7590        | 10/04/2006           |                               |                  |
| FENWICK & WEST LLP<br>SILICON VALLEY CENTER<br>801 CALIFORNIA STREET<br>MOUNTAIN VIEW, CA 94041 |             |                      | EXAMINER<br>NGUYEN, MERILYN P |                  |
|   |             |                      | ART UNIT                      | PAPER NUMBER     |
|   |             |                      | 2163                          |                  |

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/727,700

Applicant(s)

MUDUNURI ET AL.

Examiner

Merilyn P. Nguyen

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/26/06 & 06/21/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

***DETAILED ACTION***

1. Claims 1-54 are pending in this action.
2. PCT/US04/37698 is a continuation of the instant application.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the **first paragraph** of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, “synchronizing the transaction boundaries” in order to complete the processing of the plurality of data records (as per claims 1, 26 and 53) or to complete the series of transformations (as per claims 12, 37 and 54), which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The dependent claims recite the setting of transaction boundaries is performed based on the row count, time stamp, the result of previous data transformation, or user-defined rules; however, how these transaction boundaries are related to perform the synchronization was not described in the specification.
4. Claims 1-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims (claims 1, 12, 26, 37, 53 and 54) contains subject matter, “synchronizing the transaction boundaries” to complete data processing or data transformation, which was not described in the specification in such a way as to enable one

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skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification repeatedly discloses synchronizing the transaction boundaries without describing how the transaction boundaries were synchronized in order to complete the data processing or transformation.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 7-8, 12, 18-19, 26, 32-33, 37, 43-44, and 51-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, there is insufficient antecedent basis for “the data set” at line 4 and “the one or more transaction sets” at line 5. It is unclear whether “the data set” is “one or more data sets”. Also, the recitation of “processing each of the data set thereby producing a multiplicity of results from the one or more transaction sets” renders the claim vague and indefinite because it’s unclear how to processing each of the data set from *the one or more transaction sets*.

Regarding claims 7, 18, 32, and 43, the claims recite “the rules comprising one ore more tables in a database” which is vague. Does it mean that the rules implementing on one ore more table?

Regarding claims 7, 8, 18, 19, 32, 33 and 43-44, there is insufficient antecedent basis for “the rule”. It is unclear whether “the rule” is one or more rules.

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Regarding claims 12, 37 and 54, there is insufficient antecedent basis for “said series of set-based transformations” at line 9, lines 10-11, and lines 10-11 respectively.

Regarding claims 26 and 53, there is insufficient antecedent basis for “said data set” at line 4 and line 6 respectively. It is unclear whether “said data set” is “one or more data sets”.

Regarding claims 51 and 52, the claims recite, “a computer program product implementing the system” of claims 26 and 37. However, claims 26 and 37 recite a system having means plus functions, therefore the claimed language is vague. The Applicants is respectfully suggested that “a computer program product” needed to comprise computer readable medium storing functions steps of claims 26 and 37.

Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7, 11-18, 22-32, 36-43 and 47-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kori (US 6,397,223), in view of Miller (US 2004/0010538).

Regarding claims 1, 26 and 53, Kori discloses a method, a system and a computer readable medium for processing a plurality of data records, comprising:

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- setting transaction boundaries (predetermined N records) among said plurality of data records thereby dividing the plurality of data records into one or more data sets (record groups 11) (See col. 5, lines 10-15);
- processing each of the data set thereby producing a multiplicity of results from the one or more transaction sets (As best understood, “the one or more transaction sets” is construed as the same as one or more data sets, and the function of processing each of the data set thereby producing a multiplicity of results being described by Kori in col. 5, lines 17-35); and
- completing the processing of the plurality of data records by combining said multiplicity of results (“transposed file is generated”, See col. 5, lines 37-52).

However, Kori is silent as to completing the processing of the plurality of data records by synchronizing the transaction boundaries. On the other hand, Miller teaches synchronizing the transaction boundaries (See page 3, paragraph [0035, lines begin with “this timestamp 530 is a timestamp that is generated from a time source that is synchronized...”] and paragraph [0037]). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to completing the processing of the plurality of data records by synchronizing the transaction boundaries as suggested by Miller. The motivation would have been enable the consistency among data record groups. Applicant please notes that the action being described as “synchronizing the transaction boundaries” is vague and indefinite giving the lack of support found in the specification. As best understood, the “synchronizing the transaction boundaries” is construed as the same function being described by Miller.

Regarding claims 12, 37 and 54, Kori discloses a method, a system and a computer readable medium method for performing a series of transformations on a plurality of data records, wherein said series of transformations initiate at a source (original file) and conclude at a target (transposed file) (See col. 5, lines 9-60), said method comprises:

- setting transaction boundaries (predetermined N records) among said plurality of data records at said source thereby dividing the plurality of data records into one or more data sets (record groups 11) (See col. 5, lines 10-15);
- propagating the transaction boundaries through the series of transformations from the source to the target (See col. 5, lines 13-15 and lines 30-35);
- performing said series of transformations based on the one or more data sets thereby producing a multiplicity of results from said series of set-based transformations (See col. 5, lines 17-35); and
- completing the series of transformations by combining said multiplicity of results (“transposed file is generated”, See col. 5, lines 37-52).

However, Kori is silent as to completing the series of transformations by synchronizing the transaction boundaries. On the other hand, Miller teaches synchronizing the transaction boundaries (See page 3, paragraph [0035, lines begin with “this timestamp 530 is a timestamp that is generated from a time source that is synchronized...”] and paragraph [0037]). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to completing the processing of the plurality of data records by synchronizing the transaction boundaries as suggested by Miller. The motivation would have been enable the consistency among data record groups. Applicant please notes that the action being described as

“synchronizing the transaction boundaries” is vague and indefinite giving the lack of support found in the specification. As best understood, the “synchronizing the transaction boundaries” is construed as the same function being described by Miller.

Regarding claims 2, 13, 27 and 38, Kori/Miller discloses wherein the setting of transaction boundaries is performed based on the row count of the data records (record count = row count, col. 5, lines 13-15, Kori et al.).

Regarding claims 3, 14, 28, and 39, Kori/Miller discloses wherein the setting of transaction boundaries is performed based on the time stamp of the data records (See paragraph [0037], Miller et al.).

Regarding claims 4, 15, 29 and 40, Kori/Miller discloses wherein the setting of transaction boundaries is performed based on the result of a previous data transformation (See col. 4, lines 43-58, Kori et al.).

Regarding claims 5, 16, 30 and 41 Kori/Miller discloses wherein the setting of transaction boundaries is performed based on a user-defined logic, wherein the user-defined logic is one or more rules defined by a user (See col. 5, lines 13-15, wherein Kori discloses user-defined rules as division is based on units of predetermined N records).

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Regarding claims 6, 17, 31 and 42, Kori/Miller discloses wherein the user-defined logic is on a real-time basis (See col. 4, lines 50-55 and col. 5, lines 9-15, Kori et al.).

Regarding claims 7, 18, 32 and 43, Kori/Miller discloses wherein the rules comprise one or more tables in a database (See col. 5, lines 10-15, Kori et al.).

Regarding claims 11, 25, 36, and 50, Kori/Miller discloses wherein said processing comprises at least one of insert, update, delete, aggregation, rank, sort, sequence, and join (See col. 5, lines 17-45, Kori et al.).

Regarding claims 22 and 47, Kori/Miller discloses wherein the propagating comprises setting and maintaining one or more transaction queues capable of defining the boundaries of the data sets (See paragraphs [0033-0034], Miller et al.).

Regarding claims 23 and 48, Kori/Miller discloses wherein the transaction queues comprise one or more tables in a database (See paragraph [0033], Miller et al.).

Regarding claims 24 and 49, Kori/Miller discloses wherein said transaction queues are maintained in a computer memory (See Message Queue 830, Fig. 1, Miller et al.).

Regarding claims 51 and 52, Kori/Miller discloses a computer program product implementing the system of claims 26 and 37 (See Fig. 3, Kori et al.).

7. Claims 8-10, 19-21, 33-35 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kori (US 6,397,223), in view of Miller (US 2004/0010538), further in view of Agrawal (US 6,230,151).

Regarding claims 8, 19, 33 and 44, Kori/Miller discloses all the claimed subject matter as set forth above. However, Kori/Miller is silent as to wherein the rules comprise one or more statements defining relationships and actions in a suitable programming language. On the other hand, Agrawal teaches the rules comprise one or more statements defining relationships and actions in a suitable programming language such as SQL (See col. 1, lines 40-50 Agrawal et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use SQL programming language to define relationships and action. The motivation would have been to enhance the ability of accessing the data base system of the Kori/Miller by using SQL programming language-comprising statements (rules) (See col. 1, lines 49-50). Agrawal et al.).

Regarding claims 9, 20, 34 and 45, Kori/Miller/Agrawal discloses wherein the suitable programming language is one of Generation III Languages (3GL), Generation IV Languages (4GL), and Generation V (5GL) Languages (See col. 1, lines 40-50 Agrawal et al.).

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Regarding claims 10, 21, 35, and 46, Kori/Miller/Agrawal discloses wherein the suitable programming language is an expert system tool (See col. 1, lines 40-50 Agrawal et al.).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harper U.S Patent No. 7,024,401 discloses partition boundary determination using random sampling on very large databases.

Brunner US 2003/0083822 discloses systems and methods for monitoring behavior informatics.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026. The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



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September 25, 2006

  
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